Registration of Crop Cultivars

REGISTRATION OF "123" ALFALFA
(Reg. No. 46)
I. J. Johnson

'123' (Medicago sativa) is a winter-hardy and bacterial wilt resistant cultivar developed by Cal/West Seeds, Inc. and released in 1967 to DeKalb Ag Research, Inc. 123 is a synthetic made by recombining seven parental clones all of which were initially derived from the cultivar 'Vernal.' The seven parental clones were chosen from among 294 tested in replicated clonal nursery trials in the Midwest and for seed yields and other attributes in replicated clonal nursery trials at Woodland, California. From this number 13 clones were chosen and a complete diallel among them was tested for forage yields and other characteristics in the Midwest nursery. The seven clones were chosen on the basis of mean average combining ability for forage yields, fall dormancy, leafiness and color scores, foliage disease resistance and for wilt resistance of their S, progenies.

Forage trials comparing 123 with other winter-hardy, wilt-resistant cultivars have been conducted extensively in its major area of adaptation in the North Central Region. Forage yields have been equal to or slightly higher than Vernal, foliar disease scores have shown resistance levels equal to or superior to Vernal and consistently superior to 'Ranger.' Bacterial wilt resistance was equal to Vernal in the Minnesota Wilt Test. 123 can be distinguished from Vernal by its low percentage of plants (approximately 1%) with yellow flower color.

Breeder seed of 123 is produced in isolation from a recombination of the seven parental clones propagated by cuttings.